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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/779,695 | 02/18/2004 | Dietmar Boxberg | P63366US1 | 9535 |
| 136 | 7590 | 10/17/2005 | EXAMINER | |
| JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004 | | | FLORES SANCHEZ, OMAR | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3724 | |

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,695

Applicant(s)

BOXBERG ET AL.

Examiner

Omar Flores-Sánchez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment received on 08/05/05.

Specification

2. The amendment filed 08/05/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Figures 1 and 2 were not previously presented or disclosed in the specification as original filed. Also, Figures 3 and 4 illustrate cutting edges arranged radially outwards with respect to the periphery of the disk and screws for connecting the inserts to the disk, were not previously presented or disclosed in the specification as original filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. Claims 3 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following subject matter were not described in the specification: the indexable inserts or annular cutting tools comprise a cutting edge that is arranged spaced radially outwards

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with respect to the periphery of the disk and the indexable inserts or annular cutting tools are connected to the disk by screws pointing radially to counteract centrifugal force on the indexable inserts or annular cutting tools caused by rotation of the disk; and a motor spindle comprising a spindle.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 3, 4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Wayne (5,129,296).

Wayne discloses (Fig. 1-9) the invention including a disk having a diameter of 18 inch, inserts 22 on a range of 10-30 and a motor having a spindle (see col. 3, line 50). Regarding cutting speeds, Wayne is capable of perform speed at 10-100m/s or 20-60 m/s if we set the rpm to 3000.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wayne (5,129,296) in view of Scholz et al. (5,660,092).

Wayne discloses (Fig. 1-9) the method of using a rotating cutting head for working the surface of elastomers including a disk having a diameter of 18 inch and inserts 22 on a range of 10-30. The method comprising the step of: applying the rotating cutter head to the elastomer surface (see col. 1, lines 34-35). Regarding claims 5-6, Wayne does not show the step of rotating the cutter head at a periphery speed of 10 to 100 m/s or 20-60 m/s and up to 3000 rpm. However, Scholz et al. discloses the step of rotating the cutter head about 500 to 120,000 rpm (see col. 4, lines 33-35) for the purpose of better cutting the material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Wayne's device by providing the step of rotating the cutter head about 500 to 120,000 rpm as taught by Scholz et al. in order to better cut the material. Regarding rotating the cutter head at a periphery speed of 10 to 100 m/s or 20-60 m/s cutting speeds, the combination Wayne and Scholz et al. performs speed at 10-100m/s or 20-60 m/s if we set the rpm to 3000. Also, Scholz et al. teaches cutting elastomer that is a surface of a roller (Fig. 1-2) and it having a shore of hardness in the range of 10Shore A to 100 Shore D (see col. 4, line 23).

8. Claims 3, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott (4,515,055) in view of Proulx (5,647,264).

The following rejection considers the new subject matter in alternative form in case the new subject matter is considered to be part of the original disclosure.

Scott discloses the invention substantially as claimed including a disk having a diameter of between 5 to 15 inch (see col.4, line 3), and rpm of 3000 (see col. 4, line 5), inserts 14, a cutting edge spaced radially outwards with respect to the periphery of the disk and motor with spindle (see col. 3, lines 30 and 35-37; col. 4, line 5). Regarding cutting speeds, Scott is capable of perform speed at 10-100m/s or 20-60 m/s if we set the rpm to 3000. Scott does not show inserts on a range of 10-30 and screws. However, Proulx teaches the use of inserts on a range of 10-30 and screws for the purpose of increasing the cutting effect and allowing easy replacement of the inserts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Scott's device by providing the inserts on a range of 10-30 and screws as taught by Proulx in order to obtain a device that increases the cutting effect and allows easy replacement of the inserts. Since applicant admitted in his Remark that elastomers material behave like a solid material when cutting at high speed, Scott in view of Proulx is capable of being use to cut elastomers material.

Response to Arguments

9. Applicant's arguments have been fully considered but they are not persuasive. Applicant's remarks, on page 7 lines 2-4, discloses that the spindle turns clockwise and the rotating cutter head turns counter clockwise, or vise versa, the effective cutting speed at the surface of the elastomers can be increased without increasing the rotation speed or the diameter of the rotating cutter head. However, there is no evidence in the original specification of such impressive result. It is not clear how the spindle turns clockwise and the rotating cutter head turns counter clockwise, when no structure is disclosed in the specification to perform the above

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functions. Also there is no real and concrete evidence that the effective cutting speed at the surface of the elastomers can be increased without increasing the rotation speed or the diameter of the rotating cutter head. Applicant argues that support for the claim 9 can be found in the specification on page 2 and 3. However, there is no support for claim 9 in the specification. Also, applicant relies on a foreign reference (DE 43 05 716) for supporting the introduction of the motor spindle, but nothing in the specification indicates that the foreign reference is incorporated.

Applicant argues that Wayne in view of Scholz can't be combined because the Wayne's device operates to cut yieldable material and Scholz's device operates at high speed where elastomers material behave like a solid material. However, applicant admits that Scholz operates at lower region of 500-120,000 rpm range, which the resulting surface acting like elastic/yieldable material (see Remarks, page 11, lines 16-19). The above argument is clear evidence that Wayne in view of Scholz can be combined to cut elastic/yieldable material if the range is set at 500-120,000 rpm.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Flores-Sánchez whose telephone number is 571-272-4507. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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10/15/05


BOYER D. ASHLEY
PRIMARY EXAMINER